WHAT IS CLAIMED IS:

1.   A   method   for   processing   image   information,
comprising:

receiving light comprising image information;

performing a first optical transform on the light to
yield a first optically transformed light;

performing a second optical transform on the light
to yield a second optically transformed light;

generating a first metric in accordance with the
first optically transformed light;

generating a second metric in accordance with the
second optically transformed light;

processing the first metric and the second metric to
yield a processed metric; and

performing an inverse optical transform on the
processed metric to process the image information of the
light.

2.   The   method   of   Claim   1,   wherein   the   first
optical transform is substantially similar to the second
optical transform.

3.   The   method   of   Claim   1,   wherein   the   first
optical transform is compatibly different from the second
optical transform.

4.   The method of Claim 1, wherein:

the   first   optical   transform   comprises   a   first
Fourier transform; and

the   second   optical   transform   comprises   a   second
Fourier transform.

13

5.   The method of Claim 1, wherein processing the first metric and the second metric to yield a processed metric comprises:

    selecting first data from the first metric;

5   selecting second data from the second metric; and

    fusing the first data and the second data to yield the processed metric.

6.   The method of Claim 1, wherein processing the

10   first metric and the second metric to yield a processed metric comprises:

    generating the processed metric in response to the first metric and the second metric; and

    detecting a target using the processed metric.

15

7.   The method of Claim 1, further comprising:

    generating an image from the processed metric; and

    displaying the image.

14

8.   A   system   for   processing   image   information,
comprising:

a   plurality   of   optical   transformers   operable   to
receive   light   comprising   image   information,   a   first
optical   transformer   operable   to   perform   a   first   optical
transform   on   the   light   to   yield   a   first   optically
transformed   light,   a   second   optical   transformer   operable
to   perform   a   second   optical   transform   on   the   light   to
yield   a   second   optically   transformed   light;

a   first   processor   operable   to   generate   a   first
metric   in   accordance   with   the   first   optically   transformed
light;

a   second   processor   operable   to   generate   a   second
metric   in   accordance   with   the   second   optically
transformed   light;

an   image   processor   operable   to   process   the   first
metric   and   the   second   metric   to   yield   a   processed   metric;
and

an   inverse   optical   transformer   operable   to   perform
an   inverse   optical   transform   on   the   processed   metric   to
process   the   image   information   of   the   light.

9.   The   system   of   Claim   8,   wherein   the   first
optical   transform   is   substantially   similar   to   the   second
optical   transform.

10.   The   system   of   Claim   8,   wherein   the   first
optical   transform   is   compatibly   different   from   the   second
optical   transform.

15

11.   The system of Claim 8, wherein:

the   first   optical   transform   comprises   a   first
Fourier transform; and

the   second   optical   transform   comprises   a   second
Fourier transform.

12.   The   system   of   Claim   8,   wherein   the   image
processor is operable to process the first metric and the
second metric to yield a processed metric by:

selecting first data from the first metric;

selecting second data from the second metric; and

fusing the first data and the second data to yield
the processed metric.

13.   The   system   of   Claim   8,   wherein   the   image
processor is operable to process the first metric and the
second metric to yield a processed metric by:

generating the processed metric in response to the
first metric and the second metric; and

detecting a target using the processed metric.

14.   The system of Claim 8, further comprising a
display operable to:

generate an image from the processed metric; and

display the image.

16

    15. A system for processing image information, comprising:

    means for receiving light comprising image information;

5   means for performing a first optical transform on the light to yield a first optically transformed light;

    means for performing a second optical transform on the light to yield a second optically transformed light;

    means for generating a first metric in accordance

10   with the first optically transformed light;

    means for generating a second metric in accordance with the second optically transformed light;

    means for processing the first metric and the second metric to yield a processed metric; and

15   means for performing an inverse optical transform on the processed metric to process the image information of the light.

16. A method for processing image information, comprising:

receiving light comprising image information;

performing a first optical transform on the light to yield a first optically transformed light, the first optical transform comprising a first Fourier transform;

performing a second optical transform on the light to yield a second optically transformed light, the second optical transform comprising a second Fourier transform, the first optical transform substantially similar to the second optical transform or compatibly different from the second optical transform;

generating a first metric in accordance with the first optically transformed light;

generating a second metric in accordance with the second optically transformed light;

processing the first metric and the second metric to yield a processed metric by performing a procedure selected from a group consisting of a first procedure and a second procedure, the first procedure comprising: selecting first data from the first metric, selecting second data from the second metric, and fusing the first data and the second data to yield the processed metric, the second procedure comprising: generating the processed metric in response to the first metric and the second metric, and detecting a target using the processed metric;

performing an inverse optical transform on the processed metric to process the image information of the light;

generating an image from the processed metric; and

displaying the image.